

(FILE 'USPAT' ENTERED AT 14:24:42 ON 14 MAY 96)

L1 33 S ULTRASO? SCANNER# AND 364/CLAS
L2 8 S L1 AND EVALUAT?
L3 414 S ULTRASO? SCANNER#
L4 194 S L3 AND (EVALUAT? OR CALIBRAT? OR TEST?)
L5 5 S L4 AND PHANTOM (5A) TEST
L6 46 S L4 AND SOFTWARE#
L7 24 S L6 AND UNIFORM?
L8 7 S L7 AND (CYST# OR TUMOR#)
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381

359 / 110 / 102 / 103

356

364 / 525

204 / 157.15⁺

> d 1-12

1. 5,454,717, Oct. 3, 1995, Custom orthodontic brackets and bracket forming method and apparatus; Craig A. Andreiko, et al., 433/24 [IMAGE AVAILABLE]
2. 5,447,432, Sep. 5, 1995, Custom orthodontic archwire forming method and apparatus; Craig A. Andreiko, et al., 433/24 [IMAGE AVAILABLE]
3. 5,431,562, Jul. 11, 1995, Method and apparatus for designing and forming a custom orthodontic appliance and for the straightening of teeth therewith; Craig A. Andreiko, et al., 433/24 [IMAGE AVAILABLE]
4. 5,368,478, Nov. 29, 1994, Method for forming jigs for custom placement of orthodontic appliances on teeth; Craig A. Andreiko, et al., 433/24; 364/413.28; 433/3 [IMAGE AVAILABLE]
5. 4,974,461, Dec. 4, 1990, Anthropomorphic cardiac ultrasound ****phantom****; Stephen W. Smith, et al., 73/865.6, 1DV; 434/268 [IMAGE AVAILABLE]
6. 4,949,310, Aug. 14, 1990, Maltese cross ****processor****: a high speed compound acoustic imaging system; Stephen W. Smith, et al., 367/7; 73/628; 128/660.01 [IMAGE AVAILABLE]
7. 4,913,159, Apr. 3, 1990, Method for determining blood flow through a narrowed orifice using color doppler echocardiography; Julius M. Gardin, et al., 128/661.1; 73/861.25 [IMAGE AVAILABLE]
8. 4,894,013, Jan. 16, 1990, Anthropomorphic cardiac ultrasound ****phantom****; Stephen W. Smith, et al., 434/268; 73/866.4 [IMAGE AVAILABLE]
9. 4,385,634, May 31, 1983, Radiation-induced thermoacoustic imaging; Theodore Bowen, 128/653.1; 73/643; 128/659, 660.01, 736 [IMAGE AVAILABLE]
10. 4,325,256, Apr. 20, 1982, Optical bichromatic position finder; Michael Horn, 73/607, 618, 633 [IMAGE AVAILABLE]
11. 4,321,830, Mar. 30, 1982, Optical bichromatic position finder; Michael Horn, 73/607, 618, 633; 364/559 [IMAGE AVAILABLE]
12. 4,275,596, Jun. 30, 1981, Optical bichromatic position finder; Michael Horn, 73/607, 618, 633 [IMAGE AVAILABLE]

2. 5,463,593, Oct. 31, 1995, Apparatus for quantitative measurements of ultrasonic wave power distribution; Claudio I. Zanelli, et al., 367/13
[IMAGE AVAILABLE]

1. 5,385,147, Jan. 31, 1995, Method of ultrasonic imaging of the gastrointestinal tract and upper abdominal organs using an orally administered negative contrast medium; Leslie D. Anderson, et al., 128/662.02 [IMAGE AVAILABLE]

2. 5,339,282, Aug. 16, 1994, Resolution enhancement for ultrasonic reflection mode imaging; Paul K. Kuhn, et al., 367/7, 902 [IMAGE AVAILABLE]

3. 4,974,461, Dec. 4, 1990, Anthropomorphic cardiac ultrasound phantom; Stephen W. Smith, et al., 73/865.6, 1DV; 434/268 [IMAGE AVAILABLE]

4. 4,894,013, Jan. 16, 1990, Anthropomorphic cardiac ultrasound phantom; Stephen W. Smith, et al., 434/268; 73/866.4 [IMAGE AVAILABLE]

5. 4,331,021, May 25, 1982, Contrast resolution tissue equivalent ultrasound **test** object; Hector Lopez, et al., 73/1DV [IMAGE AVAILABLE]

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L1 33 S ULTRASO? SCANNER# AND 364/CLAS
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L4 194 S L3 AND (EVALUAT? OR CALIBRAT? OR TEST?)
L5 5 S L4 AND PHANTOM (5A) TEST

=>

1. 5,391,139, Feb. 21, 1995, Real time radiation treatment planning system; Gregory K. Edmundson, 600/7; **364/413.26**; 600/3 [IMAGE AVAILABLE]
2. 5,384,861, Jan. 24, 1995, Multi-parameter image display with real time interpolation; Rodney A. Mattson, et al., 382/131; **364/413.13**, **413.17** [IMAGE AVAILABLE]
3. 5,368,478, Nov. 29, 1994, Method for forming jigs for custom placement of orthodontic appliances on teeth; Craig A. Andreiko, et al., 433/24; **364/413.28**; 433/3 [IMAGE AVAILABLE]
4. 5,367,318, Nov. 22, 1994, Method and apparatus for the simultaneous display of one or more selected images; Raymond A. Beaudin, et al., 345/201, 185; **364/413.22** [IMAGE AVAILABLE]
5. 5,339,815, Aug. 23, 1994, Methods and apparatus for analyzing an ultrasonic image of an animal or carcass; Yujun Liu, et al., 128/660.01, 660.07; **364/413.25** [IMAGE AVAILABLE]
6. 5,331,964, Jul. 26, 1994, Ultrasonic phased array imaging system with high speed adaptive processing using selected elements; Gregg E. Trahey, et al., 128/661.01, 660.07; **364/413.25** [IMAGE AVAILABLE]
7. RE 34,566, Mar. 22, 1994, Three-dimensional imaging system; Robert S. Ledley, 128/660.07; 73/621, 624, 626; 128/916; 348/46; **364/413.25** [IMAGE AVAILABLE]
8. 5,260,871, Nov. 9, 1993, Method and apparatus for diagnosis of breast tumors; Victor Goldberg, **364/413.02**, **413.01**, **413.13**; 382/128, 157 [IMAGE AVAILABLE]
9. 5,250,933, Oct. 5, 1993, Method and apparatus for the simultaneous display of one or more selected images; Raymond A. Beaudin, et al., 345/115, 185; 348/163; **364/413.22** [IMAGE AVAILABLE]
10. 5,208,747, May 4, 1993, Ultrasonic scanning method and apparatus for grading of live animals and animal carcasses; John Wilson, et al., **364/413.25**; 128/660.07 [IMAGE AVAILABLE]
11. 5,172,343, Dec. 15, 1992, Aberration correction using beam data from a phased array **ultrasonic** **scanner**; Matthew O'Donnell, 367/7; 73/626; 128/661.01; **364/413.25**; 367/11, 103, 105 [IMAGE AVAILABLE]
12. 5,163,013, Nov. 10, 1992, Device for measurement of ultrasonic transit times; Rudiger Herzer, et al., **364/563**, **569**; 377/20

[IMAGE AVAILABLE]

13. 5,098,426, Mar. 24, 1992, Method and apparatus for precision laser surgery; H. Alfred Sklar, et al., 606/5; 128/630; 219/121.6, 121.62, 121.85; 351/209; **364/413.02**, **413.13**; 606/4, 10, 13 [IMAGE AVAILABLE]

14. 4,982,339, Jan. 1, 1991, High speed texture discriminator for ultrasonic imaging; Michael F. Insana, et al., **364/507**; 73/599, 602; 128/660.01; **364/413.25** [IMAGE AVAILABLE]

15. 4,939,646, Jul. 3, 1990, Method for representing digitized image data; Jacques R. Essinger, et al., **364/413.22**, **413.13**; 378/901; 382/128 [IMAGE AVAILABLE]

16. 4,937,767, Jun. 26, 1990, Method and apparatus for adjusting the intensity profile of an ultrasound beam; Jorg Reuschel, et al., **364/570**; 73/609, 646; 367/103, 105, 138, 155 [IMAGE AVAILABLE]

17. 4,920,573, Apr. 24, 1990, Method for generating perpendicular synthesized cross-sectional images; Michael L. Rhodes, et al., 382/131; **364/413.19**, **413.22**, **413.28**; 378/21, 38, 40, 901; 382/242 [IMAGE AVAILABLE]

18. 4,881,177, Nov. 14, 1989, Ultrasonic scanning system; James H. McClean, et al., 395/93; 73/619, 634; **364/474.37**; 382/151; 901/44, 47 [IMAGE AVAILABLE]

19. 4,817,015, Mar. 28, 1989, High speed texture discriminator for ultrasonic imaging; Michael F. Insana, et al., **364/507**; 73/599, 602; 128/660.01; **364/413.25** [IMAGE AVAILABLE]

20. 4,751,846, Jun. 21, 1988, Reducing noise in ultrasonic images; Bruno Dousse, 73/602; 348/163; **364/413.25**, **724.05** [IMAGE AVAILABLE]

21. 4,747,411, May 31, 1988, Three-dimensional imaging system; Robert S. Ledley, 128/660.07; 73/621, 624, 626; 128/916; 348/42, 163; **364/413.25** [IMAGE AVAILABLE]

22. 4,722,056, Jan. 26, 1988, Reference display systems for superimposing a tomographic image onto the focal plane of an operating microscope; David W. Roberts, et al., **364/413.22**; 128/653.1; 606/130 [IMAGE AVAILABLE]

23. 4,528,651, Jul. 9, 1985, Method and apparatus for measurement of length and height of objects; Gregory K. Brock, et al., 367/99; **364/562**; 367/96, 107 [IMAGE AVAILABLE]

24. 4,471,449, Sep. 11, 1984, Scan converter system; Steven C. Leavitt, et al., **364/577**; 73/620; 348/163, 441; **364/514A** [IMAGE AVAILABLE]

25. 4,449,199, May 15, 1984, Ultrasound scan conversion and memory system; Ronald E. Daigle, 395/164; **364/920**, **920.7**, **926.1**, **926.3**, **927.1**, **929.1**, **932**, **932.62**, **939**, **939.2**, **940**, **942**, **951.1**, **951.4**, **957**, **957.1**, **960**, **960.6**, **963**, **963.2**, **964**, **964.7**, **966.1**, **966.3**, **966.4**, **DIG.2** [IMAGE AVAILABLE]

26. 4,375,671, Mar. 1, 1983, Method and means for filtering and updating pixel data; Gary L. Engle, 367/11; 348/163; **364/413.25** [IMAGE AVAILABLE]

27. 4,356,731, Nov. 2, 1982, Method and means for generating time gain compensation control signal for use in **ultrasonic** **scanner** and the like; John E. Mahony, 73/631, 900; **364/571.04** [IMAGE AVAILABLE]

28. 4,321,830, Mar. 30, 1982, Optical bichromatic position finder; Michael Horn, 73/607, 618, 633; **364/559** [IMAGE AVAILABLE]

29. RE 30,397, Sep. 9, 1980, Three-dimensional ultrasonic imaging of animal soft tissue; Donald L. King, 128/660.07, 916; **364/413.22**, **413.25** [IMAGE AVAILABLE]

30. 4,206,654, Jun. 10, 1980, Video display control for diagnostic scanners; John T. Keller, et al., 73/620; 128/660.07; **364/413.22**, **413.25** [IMAGE AVAILABLE]

31. 4,140,022, Feb. 20, 1979, Acoustic imaging apparatus; Samuel H. Maslak, 73/626; **364/413.25**; 367/7, 103 [IMAGE AVAILABLE]

32. 4,075,883, Feb. 28, 1978, Ultrasonic fan beam scanner for computerized time-of-flight tomography; Gary H. Glover, 73/607, 602, 618; 128/661.02; **364/413.25**; 378/17, 37, 208 [IMAGE AVAILABLE]

33. 3,573,449, Apr. 6, 1971, OPTICAL PULSE EXPANSION SYSTEM; William T. Maloney, **364/822**; 250/225; 324/76.36; 359/285 [IMAGE AVAILABLE]

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1. 5,368,478, Nov. 29, 1994, Method for forming jigs for custom placement of orthodontic appliances on teeth; Craig A. Andreiko, et al., 433/24; **364/413.28**; 433/3 [IMAGE AVAILABLE]
2. 5,339,815, Aug. 23, 1994, Methods and apparatus for analyzing an ultrasonic image of an animal or carcass; Yujun Liu, et al., 128/660.01, 660.07; **364/413.25** [IMAGE AVAILABLE]
3. 5,260,871, Nov. 9, 1993, Method and apparatus for diagnosis of breast tumors; Victor Goldberg, **364/413.02**, **413.01**, **413.13**; 382/128, 157 [IMAGE AVAILABLE]
4. 5,208,747, May 4, 1993, Ultrasonic scanning method and apparatus for grading of live animals and animal carcasses; John Wilson, et al., **364/413.25**; 128/660.07 [IMAGE AVAILABLE]
5. 5,163,013, Nov. 10, 1992, Device for measurement of ultrasonic transit times; Rudiger Herzer, et al., **364/563**, **569**; 377/20 [IMAGE AVAILABLE]
6. 4,751,846, Jun. 21, 1988, Reducing noise in ultrasonic images; Bruno Dousse, 73/602; 348/163; **364/413.25**, **724.05** [IMAGE AVAILABLE]
7. 4,321,830, Mar. 30, 1982, Optical bichromatic position finder; Michael Horn, 73/607, 618, 633; **364/559** [IMAGE AVAILABLE]
8. RE 30,397, Sep. 9, 1980, Three-dimensional ultrasonic imaging of animal soft tissue; Donald L. King, 128/660.07, 916; **364/413.22**, **413.25** [IMAGE AVAILABLE]

EDS MAYA Classification Report for 451035.rpt.

Top Referenced Classes:

1. 358/403 Total=5 ORs=3 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 403 .Document filing and retrieval system
2. 358/444 Total=5 ORs=2 XRs=3
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 444 ..Memory interface
3. 358/448 Total=5 ORs=0 XRs=5
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 448 ..Image processing
4. 358/524 Total=4 ORs=0 XRs=4
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 500 NATURAL COLOR FACSIMILE
 Sub 524 .Intermediate storage
5. 358/527 Total=4 ORs=3 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 500 NATURAL COLOR FACSIMILE
 Sub 527 .Color photography previewer
6. 364/413.22 Total=4 ORs=0 XRs=4
 Class 364 ELECTRICAL COMPUTERS AND DATA PROCESSING SYSTEMS
 Sub 400 APPLICATIONS
 Sub 413.01 .Life sciences
 Sub 413.13 ..Medical imaging
 Sub 413.14 ...Computed tomography using X-ray
 Sub 413.22 Image display
7. 382/132 Total=4 ORs=4 XRs=0
 Class 382 IMAGE ANALYSIS
 Sub 100 APPLICATIONS
 Sub 128 .Biomedical applications
 Sub 132 ..X-ray film analysis (e.g., radiography)
8. 395/131 Total=4 ORs=1 XRs=3
 Class 395 INFORMATION PROCESSING SYSTEM ORGANIZATION
 Sub 100 DATA PRESENTATION/COMPUTER GRAPHICS (E.G., IMAGE,
 GRAPHICS, TEXT)
 Sub 118 .Presentation processing
 Sub 129 ..Surface detail/characteristic
 Sub 131 ...Color
9. 358/404 Total=3 ORs=1 XRs=2

- Class 358 FACSIMILE OR TELEVISION RECORDING
 - Sub 400 FACSIMILE
 - Sub 404 .Facsimile memory monitoring
- 10. 358/426 Total=3 ORs=0 XRs=3
 - Class 358 FACSIMILE OR TELEVISION RECORDING
 - Sub 400 FACSIMILE
 - Sub 426 .Time or bandwidth compression
- 11. 358/450 Total=3 ORs=1 XRs=2
 - Class 358 FACSIMILE OR TELEVISION RECORDING
 - Sub 400 FACSIMILE
 - Sub 443 .Specific signal processing circuitry
 - Sub 448 ..Image processing
 - Sub 450 ...Plural images combined into a single image
- 12. 358/468 Total=3 ORs=0 XRs=3
 - Class 358 FACSIMILE OR TELEVISION RECORDING
 - Sub 400 FACSIMILE
 - Sub 443 .Specific signal processing circuitry
 - Sub 468 ..Facsimile control unit
- 13. 364/413.13 Total=3 ORs=1 XRs=2
 - Class 364 ELECTRICAL COMPUTERS AND DATA PROCESSING SYSTEMS
 - Sub 400 APPLICATIONS
 - Sub 413.01 .Life sciences
 - Sub 413.13 ..Medical imaging
- 14. 364/413.19 Total=3 ORs=0 XRs=3
 - Class 364 ELECTRICAL COMPUTERS AND DATA PROCESSING SYSTEMS
 - Sub 400 APPLICATIONS
 - Sub 413.01 .Life sciences
 - Sub 413.13 ..Medical imaging
 - Sub 413.14 ...Computed tomography using X-ray
 - Sub 413.19Particular image reconstruction technique
- 15. 364/DIG. 2 Total=3 ORs=0 XRs=3
 - Class 364 ELECTRICAL COMPUTERS AND DATA PROCESSING SYSTEMS
 - Sub DIG. 2 GENERAL PURPOSE PROGRAMMABLE DIGITAL COMPUTER SYSTEMS
- 16. 348/130 Total=2 ORs=0 XRs=2
 - Class 348 TELEVISION
 - Sub 61 SPECIAL APPLICATIONS
 - Sub 125 .Flaw detector
 - Sub 129 ..By comparison with reference object
 - Sub 130 ...With stored representation of reference object
- 17. 356/243 Total=2 ORs=0 XRs=2
 - Class 356 OPTICS: MEASURING AND TESTING
 - Sub 243 STANDARDS
- 18. 356/371 Total=2 ORs=0 XRs=2
 - Class 356 OPTICS: MEASURING AND TESTING
 - Sub 371 FOR FLATNESS

19. 356/376 Total=2 ORs=2 XRs=0
 Class 356 OPTICS: MEASURING AND TESTING
 Sub 372 BY MENSURATION
 Sub 376 .Of contour or profile
20. 358/296 Total=2 ORs=1 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 296 .Recording apparatus
21. 358/406 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 406 .Facsimile measuring, testing, or calibrating
22. 358/408 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 408 .Plural scanner station
23. 358/449 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 448 ..Image processing
 Sub 449 ...Document size detection
24. 358/451 Total=2 ORs=1 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 448 ..Image processing
 Sub 451 ...Picture size conversion
25. 358/452 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 448 ..Image processing
 Sub 452 ...Image editing
26. 358/462 Total=2 ORs=1 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 448 ..Image processing
 Sub 462 ...Text and image detection and processing
27. 358/467 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 443 .Specific signal processing circuitry
 Sub 448 ..Image processing
 Sub 467 ...Image classification and coding

28. 358/487 Total=2 ORs=1 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 400 FACSIMILE
 Sub 471 .Picture signal generator
 Sub 474 ..Scanning
 Sub 487 ...Facsimile transparency image scanning
29. 358/500 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 500 NATURAL COLOR FACSIMILE
30. 358/501 Total=2 ORs=1 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 500 NATURAL COLOR FACSIMILE
 Sub 501 .Image reproduction
31. 358/518 Total=2 ORs=0 XRs=2
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 500 NATURAL COLOR FACSIMILE
 Sub 518 .Color correction
32. 358/540 Total=2 ORs=1 XRs=1
 Class 358 FACSIMILE OR TELEVISION RECORDING
 Sub 500 NATURAL COLOR FACSIMILE
 Sub 530 .Specific image-processing circuitry
 Sub 540 ..Composite image
33. 364/920.7 Total=2 ORs=0 XRs=2
 Class 364 ELECTRICAL COMPUTERS AND DATA PROCESSING SYSTEMS
 Sub ???17 APPLICATIONS
 Sub 920.7 .Image processing
34. 364/952.31 Total=2 ORs=0 XRs=2
 Class 364 ELECTRICAL COMPUTERS AND DATA PROCESSING SYSTEMS
 Sub ???23 SPECIFIC STORAGE ELEMENT
 Sub 952 .Dynamic
 Sub 952.31 ..Optical
35. 378/207 Total=2 ORs=1 XRs=1
 Class 378 X-RAY OR GAMMA RAY SYSTEMS OR DEVICES
 Sub 204 ACCESSORY
 Sub 207 .Testing or calibration
36. 382/254 Total=2 ORs=0 XRs=2
 Class 382 IMAGE ANALYSIS
 Sub 254 IMAGE ENHANCEMENT OR RESTORATION
37. 382/274 Total=2 ORs=0 XRs=2
 Class 382 IMAGE ANALYSIS
 Sub 254 IMAGE ENHANCEMENT OR RESTORATION
 Sub 274 .Intensity, brightness, contrast, or shading
 correction
38. 382/305 Total=2 ORs=1 XRs=1

- Class 382 IMAGE ANALYSIS
 - Sub 276 IMAGE TRANSFORMATION OR PREPROCESSING
 - Sub 305 .Image storage or retrieval
- 39. 395/106 Total=2 ORs=1 XRs=1
 - Class 395 INFORMATION PROCESSING SYSTEM ORGANIZATION
 - Sub 100 DATA PRESENTATION/COMPUTER GRAPHICS (E.G., IMAGE, GRAPHICS, TEXT)
 - Sub 101 .Static presentation processing (e.g., for printers)
 - Sub 106 ..Specific to image source